

Values Pedagogy and Teacher Education: Re-conceiving the Foundations

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Abstract: The article explores the research findings of values pedagogy, both Australian and international, and makes application to the need to re-conceive many of the assumptions and foundational theories that underpin teacher education, based on the new insights into learning, human development and student wellbeing that have resulted from these research findings.

Introduction

Recent research in fields as diverse as educational philosophy and psychology, as well as in the neurobiological sciences, has underlined the need to reassess many of the assumptions that underpin the role of the school, the teacher and education in general. Among the philosophers, the works of Carr (2003, 2006) and Kristjánsson (2007) stand out for their persistent appeal to Aristotelian ethics in attempting to forge a sustainable basis for teaching that has both philosophical integrity and practical application. Their work could be interpreted as important re-statements of the moral pragmatism of Dewey (1930), himself reliant on Aristotle (Pagan, 2008; Pamental, 2010) in arguing for the inherent moral basis of education. Their renewed interest in Aristotle is to be found amidst a rekindled interest by philosophy in the interaction between reason and emotion and the consequent need for the education of those emotions (Carr, 2009, 2010; Kristjánsson, 2010).

This philosophical interest is paralleled by an emerging focus on the relationship between cognition and emotion to be found in the psychological (Ainley, 2006; Ryan, 2007; Brackett et al., 2010) and neurobiological sciences (Damasio, 2003; Damasio & Damasio, 2007). Damasio's main research is in the neurobiology of the mind, especially concerning those neural systems that underpin reason, memory, emotion and social interaction. His work is associated with the notion of the cognition/affect/sociality nexus, a way of conceiving of emotion and feelings as not

being separate so much as inherently part of all rational processes which, together, impel action and behaviour, including moral behaviour:

Modern biology reveals humans to be fundamentally emotional and social creatures. And yet those of us in the field of education often fail to consider that the high-level cognitive skills taught in schools, including reasoning, decision making, and processes related to language, reading, and mathematics, do not function as rational, disembodied systems, somehow influenced by but detached from emotion and the body. (Immordino-Yang & Damasio, 2007, p. 3)

Research findings of this sort are causing educationists to re-think many of their assumptions about a range of developmental issues, including that of learning itself. The taxonomic notion that cognitive learning outcomes are separable from affective or social ones comes to be seen as inadequate. The idea that learning can be achieved through mastery instruction and testing, without reference to the physical, emotional and social ambience within which the learning is occurring, nor moreover to the levels of confidence and self-esteem of the learner, is similarly seen as potentially an obstruction rather than facilitation of learning. Such findings point to the need for pedagogy that engages the whole person rather than a 'separably cognitive' person. In a word, the need is for holistic education.

Holistic Education for Young Australians

In Australia, late twentieth and early twenty-first century education would seem to have been characterized by attempts to establish the conceptual grounds for holistic education consistent with the research findings above. In 1999, a gathering of the senior political and bureaucratic forces in education issued the 'Adelaide Declaration', designed to set well-informed, updated objectives for twenty-first century education. In setting the scene for a vision of holism in education, the opening statement reads:

Schooling provides a foundation for young Australians' intellectual, physical, social, moral, spiritual and aesthetic development. (MCEETYA, 1999, p. 1)

In 2008, the same authority issued the 'Melbourne Declaration' (MCEETYA, 2008) which re-stated the holistic vision by declaring:

Schools play a vital role in promoting the intellectual, physical, social, emotional, moral, spiritual and aesthetic development and wellbeing of young Australians. (p. 4)

The Melbourne Declaration was more expansive and comprehensive in specifying what the vision would mean in practical terms, including around the practicalities of curriculum:

The curriculum will enable students to develop knowledge in the disciplines of English, mathematics, science, languages, humanities and the arts; to understand the spiritual, moral and aesthetic dimensions of life; and open up new ways of thinking. (p. 13)

Between them, the Adelaide and Melbourne Declarations make it plain that effective schooling connotes an environment that encourages, supports and nurtures the holistic development of its students. The challenge remains one of finding the practical structures and pedagogies that facilitate such an ambience. In this context, an increasing store of argumentation and evidence from values pedagogy research is pertinent. Findings suggest that values-rich ambiances of learning that include explicit values discourse have capacity to draw on students' deeper learning and reflectivity and to impact on the range of developmental measures that connote holistic education of the type envisaged in the Adelaide and Melbourne Declarations. Furthermore, far from the concern that a focus on holistic learning might detract from the allegedly central purpose of the school around academic learning, there is increasing evidence that such a focus impacts positively on and may actually facilitate academic learning. Findings can be drawn widely from international studies as well as Australian ones.

International Research

Among the international studies are those of Benninga et al. (2006) that, using the California Academic Index as a guide, were able to show a correlation between high quality values (character) development and strengthened academic achievement. Davidson et al. (2007, 2010) provide explanation and evidence for a similar correlation in their linking 'performance character' and 'moral character' as integrally related in the development of personhood. Osterman (2010) offers further evidence of these joint effects in showing that it is the teacher who both provides quality content in the context of effective pedagogy and establishes positive, values-rich relationships with students

who elicits the greater academic effect in students. In other words, establishing values-rich relationships with students is itself part of effective pedagogy and, in a circular effect, high quality teaching has its own positive impact on strengthening the value-richness of these relationships, in turn impacting on the effectiveness of the learning ambience. In confirming this twin effect, Osterman (2010) cites results of a study that showed positive, value-rich relationships with students to be an inherent feature of teachers achieving optimal results.

Sokol et al. (2010) explore the binary relationship between performance and morality in terms of a disjunction in the way that moral and developmental psychologies have developed and impacted on the education profession. This account provides insight into why it is that many of the so-called 'foundations' of teaching have failed to inform and prepare teachers for holistic education and, in turn, why academic achievement for all students remains such a challenge. Arthur and Wilson (2010) report on a UK study funded by the Templeton Foundation, titled *Learning for Life*, consisting of five projects aimed at different age levels, constituting between them the largest values education study of its kind conducted in the UK. The study not only concentrates on character, but on the specific virtues and values most associated with it and their developmental and educability potential. Consistent with all the works cited above, findings from this huge, most comprehensive and exhaustive study entailing a team of Britain's top educational researchers concluded that a concentration on character by the teacher whose pedagogy models the virtues and values that underpin it has flow on effects that can transform the learning environment from one that naturally excludes those who lack dispositional readiness for learning to one that includes them.

Flay and Allred (2010) speak of academic performance, together with behaviour and character as the 'new basics' needed for successful living, that the research on the role that character formation plays on academic wellbeing is decisive but that education systems nonetheless persistently fail to draw these basics together. As a result, in the USA, educational priorities have been increasingly formed around improving academic performance while problems of behaviour have been exacerbated at the same time as academic performance has stalled. Dasoo (2010) reports on a South African program designed to instil values pedagogies in teachers and on the major impact noted of enhanced self-esteem and wellbeing on the part of teachers as they experienced the students' improved learning responses wrought by the pedagogies.

Crotty (2010) employs a Habermasian perspective to make sense of the improved academic focus that he saw so clearly demonstrated in the case studies he

observed and reported on, of students engaged in values pedagogy. This perspective enabled him to name the effect as enhanced higher order thinking leading to emancipatory knowledge, that form of higher order learning that Habermas (1972, 1974) declared to be authentic human knowing. Crotty concludes that, seen from this perspective, it is hardly surprising that the development of such powers of knowing would have flow on effects to academic performance. Studies that provide both fortified conceptual proffering and empirical verification of the inherent interconnections between values pedagogy and holistic student wellbeing, including academic enhancement, are growing in number and scope (Nucci & Narvaez, 2008; Lovat & Toomey, 2009; Arthur, 2010; Lovat et al., 2010; Lovat et al., 2011 in press). Among these studies, is crucial evidence captured in the research and practice of the projects emanating from the Australian Values Education Program

Australian Values Education Program

The Australian Values Education Program was federally funded, beginning with a pilot study in 2003, followed by the development of a *National Framework for Values Education in Australian Schools* [‘National Framework’] (DEST, 2005) that identified the developing research links between values education and good practice pedagogy and proposed a set of guidelines based on these links. The program then issued in a range of research and practice projects from 2005 to 2010, the most crucial of which were the two stages of the *Values Education Good Practice Schools Project* [‘Good Practice Schools’] (DEST, 2006; DEEWR, 2008), the *Project to Test and Measure the Impact of Values Education on Student Effects and School Ambience* [‘Testing and Measuring’] (Lovat et al., 2009) and the *Values in Action Schools Project* [‘Values in Action’] (DEEWR, 2010).

Within the two stages of ‘Good Practice Schools’, 316 schools organized into 51 clusters across the country, involving approximately 100,000 students, 10,000 teachers and 50 University academics, engaged in a variety of approaches to values education, all guided by the central principles enunciated in the ‘National Framework’. Findings from stage 1 (DEST, 2006) illustrated that a sound values pedagogy can be a powerful ally in the development of holistic learning, with positive effects demonstrated across

the range of measures, including persistent reference to the improved environment of learning and greater student attention to the regular academic work of the classroom:

We ... found that by creating an environment where (the) values were constantly shaping classroom activity, student learning was improving, teachers and students were happier, and school was calmer. (p. 120)

The Executive Summary of the report concluded that, based on the evidence, values pedagogy has potential to impact positively on the total educational environment of a school, resulting in a number of features, including strengthened teacher-student relationships, classroom climate and ethos, student attitudes and behaviour, student knowledge and understanding and student achievement. The Stage 2 Report (DEEWR, 2008) identified clearer and more sophisticated links between the rollout of values pedagogy and the effects on both student behaviour and performance.

Across the three years in which the 'Good Practice Schools' project rolled out, the nature of the evidence gradually developed from being largely anecdotal to having a measurable edge, especially as teachers began to compare enumerations of previous and present levels of factors such as behaviour disruption, work focus and attendance on the part of students. The 'Testing and Measuring' project (Lovat et al., 2009) was designed to investigate, using quantitative and qualitative methods, these apparently measurable claims. There was interest in all of the claims being made around student effects, with a dedicated focus on a range of factors which have been identified as mediating variables in facilitating student motivation and academic engagement (Deci et al., 1991; Ainley, 2006; Davis, 2006; Ryan, 2007; Brock et al., 2008).

The inherent connections between the various facets of behaviour, the positive ambience that results and improved academic focus were summarized in the report (Lovat et al., 2009) as follows:

... there was substantial quantitative and qualitative evidence suggesting that there were observable and measurable improvements in students' academic diligence, including increased attentiveness, a greater capacity to work independently as well as more cooperatively, greater care and effort being invested in schoolwork and students assuming more responsibility for their own learning as well as classroom 'chores'. (p. 6)

Finally, the 'Values in Action' project (DEEWR, 2010) focussed on student voice in its report on follow up projects in schools that had a sound tradition of integrated values-based pedagogy. The report proffered:

A range of evidence supports the impact of values education on improved student wellbeing, most especially the voices of the students themselves.
(p. 6)

In summary, the evidence from Australia and internationally is clear that the goal of holistic education of the type identified in the Adelaide and Melbourne Declarations is served well by values pedagogy. Evidence also suggests that such pedagogy is having significant impact on schools systems in various parts of the world (Nucci & Darvaez, 2008; Arthur, 2010; DEEWR, 2010; Lovat et al., 2010). Studies such as these demonstrate that the reduction of educational theory to a narrow range of factors is insufficient to provide a learning environment which supports holistic development cognitive, emotional social and spiritual development through explicit and implicit curricula. Evidence of change in teacher education, such that graduates could be assumed to be ready to engage in such pedagogy, is harder to detect.

Challenging the Foundations of Teacher Education

In light of the abundant evidence available around the effects of values pedagogy on student development across the measures, it is perhaps surprising that teacher education is not showing more signs of adjusting to accommodate this evidence. There are instances where this has occurred (cf. Toomey et al, 2010) but, for the most part, teacher education presents as a conservative industry, known more for its reactivity than pro-activity, and so it is unlikely that there will be a wholesale response from teacher education until school systems are saturated in values pedagogy and/or similarly oriented holistic pedagogies, together with their learning assumptions and results.

As suggested, teacher education tends to react to what is required in schools once this has been demonstrated to be an enduring rather than fleeting requirement, and especially once the requirement has been endorsed by a teacher employment bureaucracy. It also reacts to findings from educational research, although this is itself a conservative industry bounded by guardianship and not always quick to allow findings outside the orthodoxy to be disseminated for impact and transformation. Hence, there is a tendency for teacher education to function on the basis of an 'old order' of beliefs and priorities, and so, if not studiously reflective of its own practice, to miss what is happening in the wider world, including the schools and even educational research. In a word, it tends to rely on often dated paradigms of learning, the 'chestnuts' as it were, and so the effects of new paradigms may genuinely come as a surprise to those embedded in its culture.

Some of the older paradigms of learning relate to linear stage development and deterministic theories, be they concerned with maturation, socialization, motivation or learning itself. Especially in educational psychology, these are the theories that have tended to dominate much of what is referred to in teacher education as the 'foundations'. In spite of serious counter-research by the likes of Gilligan (1982), Hoffman (2000) and Zahn-Waxler et al. (1979), for example, it could be argued that Freudian, Piagetian and Kohlbergian research has been presented in fairly uncritical fashion as offering the firmest and most empirically sound bases for human development. Arguably, this is because these latter 'giants' of psychosocial understanding relied heavily on a combination of observation and rationalistic analysis, whereas, their 'critics' rested much of their critique on recourse to the affective. In that sense, the critics might well have been more in touch with the perspectives of the updated philosophical, psychological and neurobiological research cited above and, therefore with the assumptions and determinations of values pedagogy. If so, their critique of classical developmental theory might well be interpreted as early warning signs of the revolutionary new insights about human functioning being uncovered by this updated cross-disciplinary research and its ramifications for holistic education.

Understanding matters of human development and socialization, of the type that inform teacher education, is an ongoing enterprise. One of the problems for teacher education could be that the basis of its 'foundations' has rested for too long on theories and research that relied on the kinds of rationalism and separable cognition theories that have been under challenge for a considerable period of time, not least by the sentiments of the Adelaide and Melbourne Declarations. Furthermore, as seen in the instance of values pedagogy, these rationalistic and cognitive assumptions have actually been superseded by both new research insights and, increasingly, by insights gained from new school practices. In spite of this, these assumptions have remained fairly untouchable in teacher education. In turn, they have had a constraining effect on producing teachers capable of teaching in ways that reflect the vision of holistic education. Like so much of the social science paradigm that stemmed from the heyday of nineteenth-century science, the foundations of teacher education might be said to have failed to inform teaching in the way that it requires in the modern era (cf. Jorg et al., 2007; Lovat, 2008).

New Foundations for Teacher Education

The new foundations for teacher education need to begin with the quest that underpins the philosophical, psychological and neurobiological research. This quest is about whole person development and the form of holistic education needed to serve it. As suggested above, this cross disciplinary research has in common an interest in and focus on the integral interconnections between reason (cognition) and emotion. Arguably, the most radical and evidential findings are seen in the neurobiological work of scientists like Damasio (cf. Damasio, 2003; Immordino-Yang & Damasio, 2007) that leads inescapably to the notion of cognition, affect and sociality existing in a nexus relationship. According to these findings, emotion and feelings cannot viably be seen as neurologically separable but rather as inherent to all rational processes.

If such findings are taken seriously, then those dominant conceptions in teacher education foundations of development as linear, rational and progressive are turned on their heads. The taxonomic notion that cognitive learning outcomes can somehow be separated from affective and social learning outcomes comes to be seen as nonsense and indeed begins to explain why it is that focussing on cognitive learning outcomes in such a way leads to such grief and despair in the ‘failing tail’ of education. In contrast, Damasio’s work leads to an optimism that, if we construct pedagogy for the whole person rather than just the ‘cognitive person’, we have potential to engage the interests and attention of those not typically or easily engaged, possibly because of the many emotional issues related to heritage, disadvantage and disability that serve to block their interest, as well as, indeed, to make learning more engaging for all. Inspiring in the next generations of teachers such optimism and confidence in the power of their profession to transform life opportunities, especially for those who need the intervention of school the most, is the most crucial and urgent challenge before teacher education today.

Beyond the research cited above, and its potential to constitute a new set of foundations for teacher education, the work of Jurgen Habermas (1972; 1974; 1984; 1987) presents as archetypal to our age, including being central to the concerns of teaching, and therefore teacher education. Habermas’s theory of knowing fits well with the philosophical work of Kristjansson and Carr, as we might expect, but also with the neurobiological scientists’ insights into the nexus of cognition, affect and sociality. His theories of knowing and communicative action offer, between them, particularly powerful tools for justifying the indispensability of holistic education and,

furthermore, analysing and understanding the capacity of values pedagogy to fulfil the charter of holism. For one thing, they render the notion of values neutrality in education non-viable and therefore challenge the authenticity of any education conceived of solely in instrumentalist terms. In contrast, they lead naturally to the notion that any legitimate education requires a values-laden approach, in terms of both ambience and discourse. Hence, they help to explain why it is that the values pedagogical priority of saturating the learning experience with both a values-filled environment and explicit teaching that engages in discourse about values-related content tends towards such holistic effects as have been uncovered in recent research. Furthermore, the Habermasian notion that critical and self-reflective knowing issues in emancipation and empowerment, so spawning communicative capacity and communicative action, both justifies and explains the effects of an approach to learning that prioritizes the transaction of values.

Habermasian epistemology therefore is able to be used to justify philosophically and explain the practical effects of an approach to learning that is aimed at the full range of developmental measures in the interests of holistic student learning and wellbeing. Rather than connoting a mere moral or, least of all religious option, values pedagogy is able to be constructed philosophically and practically as an effective way in which learning can proceed in any school setting. Hence, we find Habermas regularly cited among scholars engaged in values pedagogical research (cf. Crawford 2010; Crotty, 2010; Gellel, 2010; Henderson, 2010; Lovat et al., 2010). The genius of Habermas as a foundational character for teacher education is that he is, at one and the same time, a modern and an ancient character. That is, he is a modern theorist whose work speaks to his time but also rests on the scholarship of the ages.

Conclusion

The charter for holism in education, as conceived by the likes of the Adelaide and Melbourne Declarations and as previewed in the effects of values pedagogy, challenges teacher education to reflect on the assumptions that drive it and the measures that it imposes on appraising whether student teachers are 'ready' for teaching or not. We have argued that teacher education tends to be conservative and reactive, rather than pro-active, and that it has been heavily dominated by paradigms of thought that both

educational and other research and many classroom practices are overturning. Among the newer paradigms of both research and practice is the field we have described as 'values pedagogy'. Findings from such research and practice point to values pedagogy possessing especially strong credentials in facilitating holistic education. Yet, we would argue, teacher education remains for the most part blind to and unaffected by such pedagogies and that this, in turn, impacts negatively on its potential to produce the kinds of teachers needed to fulfil and realize the charters of the Adelaide and Melbourne Declarations.

References

- Ainley, M. (2006). Connecting with learning: Motivation, affect and cognition in interest processes. *Educational Psychology Review*, 18, 391-405.
- Arthur, J. (2010). *Of good character: Exploring virtues and values in 3-25 year olds*. Exeter, UK: Academic Imprint.
- Arthur, J., & Wilson, K. (2010). New research directions in character and values education in the UK. In T. Lovat, R. Toomey & N. Clement (Eds.), *International research handbook on values education and student wellbeing* (pp. 339-358). Dordrecht, Netherlands: Springer.
- Benninga, J., Berkowitz, M., Kuehn, P., & Smith, K. (2006). Character and academics: What good schools do. *Phi Delta Kappan*, 87, 448-452.
- Brackett, M. A., Palomera, R., Mojsa, J., Reyes, M., & Salovey, P. (2010). Emotion-regulation ability, job satisfaction, and burnout among British secondary school teachers. *Psychology in the Schools*, 47, 406-417.
- Brock, L.L., Nishida, T.K., Chiong, C., Grimm, K.J., & Rimm-Kaufman, S.E. (2008). Children's perceptions of the classroom environment and social and academic performance: A longitudinal analysis of the contribution of the responsive classroom approach. *Journal of School Psychology*, 46, 129-149.
- Carr, D. (2003). Character and moral choice in the cultivation of virtue. *Philosophy*, 78(2), 219-232.
- Carr, D. (2006). Professional and personal values and virtues in education and teaching. *Oxford Review of Education*, 32, 171-183.
- Carr, D. (2009). Virtues, mixed emotions and moral ambivalence. *Philosophy*, 84(1), 31-46.
- Carr, D. (2010). Personal and professional values in teaching. In T. Lovat, R. Toomey & N. Clement (Eds.), *International research handbook on values education and student wellbeing*. (pp. 63-74) Dordrecht, Netherlands: Springer.
- Crotty, R. (2010). Values education as an ethical dilemma about sociability. In T. Lovat, R. Toomey & N. Clement (Eds.), *International research handbook on values education and student wellbeing* (pp. 631-644). Dordrecht, Netherlands: Springer.
- Damasio, A. R. (2003). *Looking for Spinoza: Joy, sorrow, and the feeling brain*. New York: Harcourt.

- Damasio, H., & Damasio, A. (2007). Social conduct, neurobiology, and education. In M. M. Suárez-Orozco (Ed.), *Learning in the global era: International perspectives on globalization and education* (pp. 104-117). Berkeley ; London: The University of California Press and the Ross Institute.
- Dasoo, N. (2010). Nurturing teacher wellbeing through values education. In T. Lovat, R. Toomey & N. Clement (Eds.), *International research handbook on values education and student wellbeing* (pp. 359-376). Dordrecht, Netherlands: Springer.
- Davidson, M., Lickona, T., & Khmelkov, V. (2007). Smart and good schools: A paradigm shift for character education. *Education Week*, 27(12), 32-40.
- Davidson, M., Khmelkov, V., & Lickona, T. (2010). The power of character: Needed for, and developed from, teaching and learning. In T. Lovat, R. Toomey & N. Clement (Eds.), *International research handbook on values education and student wellbeing* (pp. 427-454). Dordrecht, Netherlands: Springer.
- Davis, H.A. (2006). Exploring the contexts of relationship quality between middle school students and teachers. *The Elementary School Journal*, 106, 193-223.
- Deci, E.L., Vallerand, R.J., Pelletier, L.G., & Ryan, R.M. (1991). Motivation and education: The self-determination perspective. *Educational Psychologist*, 26, 325-346.
- DEEWR (2008). *At the heart of what we do: Values education at the centre of schooling*. Report of the Values Education Good Practice Schools Project – Stage 2. Melbourne: Curriculum Corporation. Available at: http://www.curriculum.edu.au/verve/_resources/VEGPSP-2_final_3_execsummary.pdf
- DEEWR. (2010). *Giving voice to the impacts of values education: The final report of the Values in Action Schools Project*. Canberra: Australian Government Department of Education, Employment and Workplace Relations. Available at: http://www.valueseducation.edu.au/values/val_vasp_final_report,30121.html
- DEST (2005). *National Framework for Values Education in Australian schools*. Canberra: Australian Government Department of Education, Science and Training. Available at: http://www.curriculum.edu.au/verve/_resources/Framework_PDF_version_for_the_web.pdf
- DEST (2006). *Implementing the National Framework for Values Education in Australian Schools*. Report of the Values Education Good Practice Schools Project – Stage 1: Final Report, September 2006. Melbourne: Curriculum Corporation. Available at: http://www.curriculum.edu.au/verve/_resources/VEGPS1_FINAL_REPORT_081106.pdf
- Dewey, J. (1930). *The quest for certainty: A study of the relation of knowledge and action*. London: George Allen & Unwin.
- Flay, B.R., & Allred, C.G. (2010). The positive action program: Improving academics, behaviour, and character by teaching comprehensive skills for successful learning and living. In T. Lovat, R. Toomey & N. Clement (Eds.), *International research handbook on values education and student wellbeing* (pp.471-502). Dordrecht, Netherlands: Springer.
- Gellel, A. (2010). Teachers as key players in values education: Implications for teacher formation. In T. Lovat, R. Toomey & N. Clement (Eds.), *International research handbook on values education and student wellbeing* (pp. 163-178). Dordrecht, Netherlands: Springer.
- Gilligan, C. (1982). *In a different voice: Psychological theory and women's development*. Cambridge, MA: Harvard University Press.
- Habermas, J. (1972). *Knowledge and human interests*. (J. Shapiro, Trans.) London: Heinemann.
- Habermas, J. (1974). *Theory and practice*. (J. Viertel, Trans.) London: Heinemann.

- Habermas, J. (1984). *Theory of communicative action*. (T. McCarthy, Trans. Vol. I) Boston: Beacon Press.
- Habermas, J. (1987). *Theory of communicative action*. (T. McCarthy, Trans. Vol. II) Boston: Beacon Press.
- Henderson, D. (2010). Embedding values through global education in social sciences pre-service teacher education: Linking the head and heart. In R. Toomey, T. Lovat, N. Clement & K. Dally (Eds.), *Teacher education and values pedagogy: A student wellbeing approach* (pp. 135-155). Sydney: David Barlow Publishing.
- Hoffman, M. L. (2000). *Empathy and moral development: Implications for caring and justice*. Cambridge: Cambridge University Press.
- Immordino-Yang, M. H., & Damasio, A. R. (2007). We feel, therefore we learn: The relevance of affect and social neuroscience to education. *Mind, Brain, and Education*, 1, 3-10.
- Jörg, T., Davis, B., & Nickmans, G. (2007). Towards a new, complexity science of learning and education. *Educational Research Review*, 2, 145-156.
- Kristjansson, K. (2007). *Aristotle, emotions and education*. Aldershot, UK: Ashgate.
- Kristjansson, K. (2010). *The self and its emotions*. Cambridge: Cambridge University Press.
- Lovat, T. (2008). About the outdated Newtonian paradigm in education and complexity and a complexity science of learning: How far are we from a paradigm shift? [Invited response]. *Educational Research Review*, 3, 77-100.
- Lovat, T., & Toomey, R. (2009). (Eds.), *Values education and quality teaching: The double helix effect*. Dordrecht, Netherlands: Springer.
- Lovat, T., Toomey, R., Dally, K., & Clement, N. (2009). *Project to test and measure the impact of values education on student effects and school ambience*. Report for the Australian Government Department of Education, Employment and Workplace Relations (DEEWR) by The University of Newcastle. Canberra: DEEWR. Available at: [http://www.curriculum.edu.au/verve/resources/Project to Test and Measure the Impact of Values Education.pdf](http://www.curriculum.edu.au/verve/resources/Project_to_Test_and_Measure_the_Impact_of_Values_Education.pdf)
- Lovat, T., Toomey, R. & Clement, N. (Eds.), (2010). *International research handbook on values education and student wellbeing*. Dordrecht, Netherlands: Springer.
- Lovat, T., Dally, K., Clement, N. & Toomey, R. (2011 in press). *Values pedagogy and student achievement: Contemporary research evidence*. Dordrecht, Netherlands: Springer
- MCEETYA. (1999). *Adelaide declaration on national goals for schooling in the twenty-first century*. Canberra: Ministerial Council on Education, Employment, Training and Youth affairs. Available at: <http://www.mceecdya.edu.au/mceecdya/publications,11582.html>
- MCEETYA. (2008). *Melbourne Declaration on Educational Goals for Young Australians*. Canberra: Ministerial Council on Education, Employment, Training and Youth Affairs. Available at: <http://www.mceecdya.edu.au/mceecdya/default.asp?id=25979>
- Nucci, L., & Narvaez, D. (Eds.), (2008). *Handbook of moral and character education*. New York: Routledge.
- Osterman, K. F. (2010). Teacher practice and students' sense of belonging. In T. Lovat, R. Toomey & N. Clement (Eds.), *International research handbook on values education and student wellbeing* (pp. 239-260). Dordrecht, Netherlands: Springer.
- Pagan, N. (2008). Configuring the moral self: Aristotle and Dewey. *Foundations of Science*, 13, 239-250.
- Pammental, N. (2010). Dewey, situationism, and moral education. *Educational Theory*, 60, 147-166.

- Rennie, J., & Theriot, S. (2010). The troika, student wellbeing and literacy education. In R. Toomey, T. Lovat, N. Clement, and K. Dally (Eds.), *Teacher education and values pedagogy: A student wellbeing approach* (pp. 121-134). Sydney: David Barlow Publishing.
- Ryan, R. M. (2007). Motivation and emotion: A new look and approach for two reemerging fields. *Motivation and Emotion*, 31, 1-3.
- Ryan, M., Carrington, S., Selva, G., & Healy, A. (2009). Taking a 'reality' check: Expanding pre-service teachers' views on pedagogy and diversity. *Asia-Pacific Journal of Teacher Education*, 37, 155-173.
- Sokol, B., Hammond, S., & Berkowitz, M. (2010). The developmental contours of character. In T. Lovat, R. Toomey & N. Clement (Eds.), *International research handbook on values education and student wellbeing* (pp. 579-604). Dordrecht, Netherlands: Springer.
- Toomey, R., Lovat, T., Clement, N., & Dally, K. (2010). (Eds.), *Teacher education and values pedagogy: A student wellbeing approach*. Sydney: David Barlow Publishing.
- Zahn-Waxler, C., Radke-Yarrow, M., & King, R. A. (1979). Child rearing and children's prosocial initiations toward victims of distress. *Child Development*, 50, 319-330.